

IN THE CLAIMS:

1. (Currently amended) A method for simulating an electronic device that interacts with a network, the simulation being carried out by a program executing in a host computer, the simulation includes simulating the electronic device's interaction with the network, the method comprising executing instructions on the host computer for:

(a) receiving data packets designating the electronic device as recipient from the network through a network interface; and

(b) transmitting the data packets to the simulation through a software interface to provide data packets for simulating the electronic device's interaction with the network[;].

2. (Currently amended) The method of claim 1, the instructions further comprising instructions for storing the data packets received from the network in a buffer allocated in the memory of the host computer.

3-4. (Canceled)

5. (Currently amended) The method of claim 2, the instructions further comprising instructions for changing the size of the buffer at run time.

6. (Currently amended) The method of claim 2, the instructions further comprising instructions to cause to be discarded ~~discarding~~ packets of data when the buffer is full.

7. (Currently amended) The method of claim 2, the instructions further

comprising instructions for keeping a record of the data packets received from the network.

8. (Currently amended) The method of claim 7, the instructions further comprising instructions for displaying the record.

9. (Currently amended) The method of claim 7, the instructions further comprising instructions for storing the record in a file.

10. (Currently amended) The method of claim 1, the instructions further comprising instructions for recording the throughput of the data packets.

11. (Currently amended) The method of claim 1, the instructions further comprising instructions for modifying the packets to make the packets suitable for receipt by the simulation.

12. (Original) The method of claim 11 wherein modifying includes removing a preamble from a data packet.

13. (Currently amended) The method of claim 1, wherein the instructions for receiving data packets from the network, and the instructions for transmitting the data packets to the simulation are executed in a single thread.

14. (Currently amended) The method of claim 1, wherein the instructions for receiving data packets from the network is executed in a first thread, and the instructions for transmitting the data packets to the simulation is executed in a second thread.

15-16. (Canceled)

17 (Previously presented) A method for testing a system for connecting an electronic device under simulation to a network, wherein the simulation is to be carried out by software in a computer, the method comprising:

- (a) generating a data packet using software in a first computer;
- (b) transmitting the data packet, from the first computer, to a second computer;
- (c) transmitting back the data packet received by the second computer to the first computer;
- (d) comparing the data packet received by the first computer with the data packet that was sent by the first computer; and
- (e) reporting an error if the data packet received by the first computer does not match the data packet that was sent by the first computer.

18. (Previously presented) A method for testing a system for connecting an electronic device under simulation to a network, wherein the simulation is to be carried out by software in a computer, the method comprising:

- (a) generating a data packet using software in a first computer;
- (b) from the first computer, transmitting the data packet to a second computer;
- (c) at the second computer, storing the data packet received from the first computer in a first buffer in the second computer;

(d) at the second computer, transmitting the data packet stored in the first buffer to a third computer;

(e) at the third computer, transmitting back the data packet received to the second computer;

(f) at the second computer, transmitting the data packet received from the third computer to the first computer;

(g) at the first computer, comparing the data packet received with the data packet that was sent; and

(h) reporting an error if the data packet received by the first computer does not match the data packet sent by the first computer.

19-24 (Canceled)

25. (Currently amended) A method for simulating an electronic device that interacts with a network, the simulation of the electronic device being carried out by a program executing in a host computer, the simulation including simulating the electronic device's interaction with the network, the method comprising executing on the host computer instructions for:

(a) receiving data packets designating the electronic device as a source through a software interface from the simulation of the electronic device's interaction with the network; and

(b) transmitting the data packets to the network through a network

interface.

26. (Currently amended) The method of claim 25, the instructions further comprising instructions for storing the data packets received from the simulation in a buffer allocated in the memory of the host computer.

27. (Currently amended) The method of claim 26, the instructions further comprising instructions for changing the size of the buffer at run time.

28. (Currently amended) The method of claim 26, the instructions further comprising instructions to cause to be discarded ~~discarding~~ packets of data when the buffer is full.

29. (Currently amended) The method of claim 25, the instructions further comprising instruction for keeping a record of the data packets received from the simulation.

30. (Currently amended) The method of claim 29, the instructions further comprising instructions for displaying the record.

31. (Currently amended) The method of claim 29, the instructions further comprising instructions for storing the record in a file.

32. (Currently amended) The method of claim 25, the instructions further comprising instructions for recording the throughput of the data packets.

33. (Currently amended) The method of claim 25, the instructions further comprising instructions for modifying the data packets to make the packets suitable for

receipt by the network.

34. (Previously presented) The method of claim 33, wherein modifying includes inserting a preamble in a data packet.

35. (Currently amended) The method of claim 25, wherein the instructions for receiving data packets from the simulation and the instructions for transmitting the data packets received from the simulation to the network are executed in a single thread.

36. (Currently amended) The method of claim 25, wherein the receiving data packets from the simulation is executed in a first thread and the transmitting the data packets to the network is executed in a second thread.

37. (Currently amended) A computer-readable medium for use in ~~connecting~~ a simulation of an electronic device ~~to a network~~, wherein the simulation is to be carried out by a program executing in a host computer, and wherein the simulation of the electronic device includes simulating the electronic device's interaction with the network; the computer-readable medium comprising computer-executable instructions to be executed on the host computer for:

(a) receiving data packets designating the electronic device as a recipient from the network through a network interface; and

(b) transmitting the data packets to the simulation through a software interface to provide data packets for simulating the electronic device's interaction with the network.

38. (Currently amended) The computer-readable medium of claim 37, further comprising computer instructions for storing the data packets received from the network in a buffer allocated in the memory of [[a]] the host computer.

39. (Previously presented) The computer-readable medium of claim 38, further comprising computer-executable instructions for changing the size of the buffer at run time.

40. (Previously presented) The computer-readable of medium claim 38, further comprising computer-executable instructions for discarding packets of data when the buffer is full.

41. (Previously presented) The computer-readable medium of claim 37, further comprising computer instructions for keeping a record of the data packets.

42. (Previously presented) The computer-readable medium of claim 41, further comprising computer-executable instructions for displaying the record.

43. (Previously presented) The computer-readable medium of claim 41, further comprising computer-executable instructions for storing the record in the storage medium.

44. (Previously presented) The computer-readable medium of claim 37, further comprising computer-executable instructions for recording the throughput of the data packets.

45. (Previously presented) The computer-readable medium of claim 37, further comprising computer-executable instructions for modifying the data packets for receipt by

the simulation.

46. (Previously presented) The computer-readable medium of claim 45, wherein the computer-executable instructions for modifying includes computer-executable instructions for removing a preamble from a data packet.

47. (Currently amended) A computer-readable medium for use in ~~connecting~~ a simulation of an electronic device ~~to a network~~, wherein the simulation is to be carried out by a program executing in a host computer, and wherein the simulation of the electronic device includes simulating the electronic device's interaction with the network; the computer-readable medium comprising computer-executable instructions to be executed on the host computer for:

(a) receiving data packets designating the electronic device as a source through a software interface from the simulation of the electronic device's interaction with the network; and

(b) transmitting the data packets received from the simulation to the network through a network interface.

48. (Previously presented) The computer-readable medium of claim 47, further comprising computer-executable instructions for storing the data packets received from the simulation in a buffer allocated in the memory of the host computer.

49. (Previously presented) The computer-readable medium of claim 48, further comprising computer-executable instructions for changing the size of the buffer at run time.



50. (Previously presented) The computer-readable medium of claim 48, further comprising computer-executable instructions for discarding packets of data when the buffer is full.

51. (Previously presented) The computer-readable medium of claim 47, further comprising computer-executable instructions for keeping a record of the data packets.

52. (Previously presented) The computer-readable medium of claim 51, further comprising computer-executable instructions for displaying the record.

53. (Previously presented) The computer-readable medium of claim 51, further comprising computer-executable instructions for storing the record in the storage medium.

54. (Previously presented) The computer-readable medium of claim 47, further comprising computer-executable instructions for recording the throughput of the data packets.

55. (Previously presented) The computer-readable medium of claim 47, further comprising computer-executable instructions for modifying the data packets to make the packets suitable for receipt by the network.

56. (Previously presented) The computer-readable medium of claim 55, wherein computer-executable instructions for modifying includes computer-executable instructions for inserting a preamble in a data packet.

57. (Previously presented) An apparatus for testing a system for connecting an electronic device under simulation to a network, wherein the simulation is to be carried

out by software in a computer, the method comprising:

- (a) a source for generating a data packet using software in a first computer;
- (b) an interface that transmits the data packet from the first computer to a second computer, and that receives the data packet back from a second computer; and
- (c) a computer program in the first computer that compares the data packet received by the first computer with the data packet that was sent by the first computer, and reports an error if the data packet received by the first computer does not match the data packet that was sent by the first computer.

58. (Previously presented) An apparatus for testing a system for connecting an electronic device under simulation to a network, wherein the simulation is to be carried out by software in a computer, the method comprising:

- (a) a source that generates a data packet using software in a first computer;
- (b) an interface in the first computer that transmits the data packet to a second computer, and receives the data packet back from the second computer;
- (c) a program running on the second computer that stores the data packet received from the first computer in a buffer allocated in the second computer;
- (d) an interface in the second computer that receives the data packet from the first computer and returns the data packet received from the third computer to the first computer;

(e) an interface in the second computer that transmits the data packet stored in the buffer to a third computer and receives back the data packet from the third computer;

(f) an interface in the third computer that receives the data packet from the second computer and transmits the data packet to the second computer; and

(g) a program running in the first computer that compares the data packet received at the first computer with the data packet that was sent from the first computer; and reports an error if the data packet received by the first computer does not match the data packet sent by the first computer.

59. (Previously presented) A computer-readable medium, for use in testing a system for connecting an electronic device under simulation to a network, wherein the simulation is to be carried out by software in a computer, the computer-readable medium comprising computer-executable instructions for:

(a) generating a data packet using software in a first computer;

(b) transmitting the data packet, from the first computer, to a second computer;

(c) transmitting back the data packet received by the second computer to the first computer;

(d) comparing the data packet received by the first computer with the data packet that was sent by the first computer; and

(e) reporting an error if the data packet received by the first computer does not match the data packet that was sent by the first computer.

60. (Previously presented) A computer-readable medium, for use in testing a system for connecting an electronic device under simulation to a network, wherein the simulation is to be carried out by software in a computer, the computer-readable medium comprising computer-executable instructions for:

(a) generating a data packet using software in a first computer;

(b) from the first computer, transmitting the data packet to a second computer;

(c) at the second computer, storing the data packet received from the first computer in a first buffer in the second computer;

(d) at the second computer, transmitting the data packet stored in the first buffer to a third computer;

(e) at the third computer, transmitting back the data packet received to the second computer;

(f) at the second computer, transmitting the data packet received from the third computer to the first computer;

(g) at the first computer, comparing the data packet received with the data packet that was sent; and

(h) reporting an error if the data packet received by the first computer does

not match the data packet sent by the first computer.

61. (Previously presented) A method for testing a system for connecting an electronic device under simulation to a network, wherein the simulation is to be carried out by software in a computer, the method comprising:

- (a) generating a data packet using software in a first computer;
- (b) from the first computer, transmitting the data packet to a second computer;
- (c) at the second computer, transmitting the data packet to a third computer;
- (d) at the third computer, transmitting back the data packet received to the second computer;
- (e) at the second computer, transmitting the data packet received from the third computer to the first computer;
- (f) at the first computer, comparing the data packet received with the data packet that was sent; and
- (g) reporting an error if the data packet received by the first computer does not match the data packet sent by the first computer.

62. (Previously presented) An apparatus for testing a system for connecting an electronic device under simulation to a network, wherein the simulation is to be carried out by software in a computer, the method comprising:

- (a) a source that generates a data packet using software in a first computer;
- (b) an interface in the first computer that transmits the data packet to a second computer and receives the data packet back from the second computer;
- (c) an interface in the second computer that receives the data packet from the first computer and returns the data packet received from the third computer to the first computer;
- (d) an interface in the second computer that transmits the data packet to a third computer and receives back the data packet from the third computer;
- (e) an interface in the third computer that receives the data packet from the second computer and transmits the data packet to the second computer; and
- (f) a program running in the first computer that compares the data packet received at the first computer with the data packet that was sent from the first computer; and reports an error if the data packet received by the first computer does not match the data packet sent by the first computer.

63. (Previously presented) A computer-readable medium, for use in testing a system for connecting an electronic device under simulation to a network, wherein the simulation is to be carried out by software in a computer, the computer-readable medium comprising computer-executable instructions for:

- (a) generating a data packet using software in a first computer;
- (b) from the first computer, transmitting the data packet to a second

computer;

(c) at the second computer, transmitting the data packet to a third computer;

(d) at the third computer, transmitting back the data packet received to the second computer;

(e) at the second computer, transmitting the data packet received from the third computer to the first computer;

(f) at the first computer, comparing the data packet received with the data packet that was sent; and

(g) reporting an error if the data packet received by the first computer does not match the data packet sent by the first computer.